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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,001	08/01/2003	Walter Harvey Waddell	2003B079	8961

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EXAMINER

RONESI, VICKEY M

ART UNIT PAPER NUMBER

1714

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/633,001

Applicant(s)

WADDELL ET AL.

Examiner

Vickey Ronesi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25, 27-35, 38-43 and 46-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25, 27-35, 38-43 and 46-83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections are withdrawn in light of applicant's amendment filed 1/17/2006.
2. Note that claims 1 and 58 has the wrong status identifier. They should be "currently amended" rather than "previously presented." While the amendment is not in compliance, in the interest of compact prosecution, the amendment has been examined with the understanding that the correct status identifiers will be used in future amendments.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
4. The new grounds of rejection set forth below are necessitated by applicant's amendment filed 1/17/2006. In particular, the independent claims have been narrowed to include specific amounts of specific ingredients. This combination of limitations was not present in the original claims. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 103

5. Claims 1-25, 27-35, 38-43, and 46-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dias et al (WO 02/48257 A2, cited on IDS dated 12/15/03).

Dias et al discloses a composition that can be used in the production of air barriers having an air permeability from 1.2×10^{-8} to 4×10^{-8} cm³-cm/cm²-s-atm at 65°C (page 58, lines 29-30) such as innerliners and innertubes (page 34, lines 5-9) comprising

- from 5 to about 100 phr (page 13, lines 5-14) of an elastomeric component such as halogenated (polyisobutylene-*co-p*-methylstyrene) which contains 0.1-5 wt % *p*-methylstyrene

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(page 54, lines 12-13) wherein the halogen is preferably bromine (page 11, lines 19-25), butyl rubber (page 6, line 10), halogenated star-branched butyl rubber, halogenated butyl rubber, and mixtures thereof (page 53, lines 10-12);

- from about 10 to about 150 phr (page 21, lines 12-13) of carbon black which are useful in innerliners and innertubes such as N762, N990, and Regal 85 which inherently has a surface area of less than $30 \text{ m}^2/\text{g}$ and a dibutylphthalate oil absorption of less than $80 \text{ cm}^3/100 \text{ g}$ (as disclosed by present disclosure on page 25, Table 2) or carbon black such as N660 which inherently has a surface area greater than $30 \text{ m}^2/\text{g}$ and a dibutylphthalate oil absorption of greater than $80 \text{ cm}^3/100 \text{ g}$ (as disclosed by present disclosure on page 25, Table 2);

- from about 1 to about 60 phr (page 21, lines 1-4) polybutene processing oil derived from olefin derived units have from 3 to 8 carbon atoms, in particular a C_4 raffinate (page 17, lines 23-29), such as those described on page 18, lines 4-21) having a viscosity ranging from 10 to 6000 cSt at 100°C (page 19, lines 2-5) and having $M_n > 400$ and $M_n < 15,000$ (page 17, line 25; page 18, lines 23-28);

- at least one filler such as those listed on page 21, lines 8-21;
- an exfoliated clay such as those listed on page 21, line 23 to page 22, line 2;
- a secondary elastomer such as those listed on page 13, lines 17-29;
- an engineering resin such as a polyamide and others such as those listed on page 15, lines 19-24;

- processing aids such as naphthentic, aromatic or paraffinic extender oils may be present or substantially absent (page 23, line 29 to page 24, line 4); and

- at least one curing agent (page 25, lines 11-15).

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The above composition is mixed together and cured (page 25, line 17 to page 28, line 3). See examples for exemplified amounts and types of butyl rubbers and polybutene processing oil.

While Dias et al fails to exemplify a composition containing carbon black in an amount greater than 60 phr or one having a surface area of less than $30 \text{ m}^2/\text{g}$ and a dibutylphthalate oil absorption of less than $80 \text{ cm}^3/100 \text{ gm}$ as required in the present claims, nevertheless, it should be noted that Dias et al does disclose the use of higher amounts of carbon black with the presently claimed surface area and absorption properties as stated on page 3 of this action. Thus, it would have been obvious to one of ordinary skill in the art to utilize higher amounts of carbon black, including amounts presently claimed, and a different carbon black in the composition of Dias et al.

Response to Arguments

6. Applicant's arguments filed 1/17/2006 have been fully considered but they are not persuasive. Specifically, applicant argues that a significantly improved balance of elastomer processability and air impermeability of the elastomer composition falling within the limitations of the claims are shown.

In response to applicant's argument, it is the examiner's position that the inventive and comparative data of the specification as originally filed is not commensurate in scope with the presently claimed invention and that the inventive and comparative examples are not proper side-by-side examples.

With respect to the data being commensurate in scope with the claimed invention, only one type of carbon black, Regal 90, is exemplified which has a surface area of $23 \text{ m}^2/\text{gm}$ and a

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DBP absorption of 32 cm³/100 gm. This does not establish improved properties for all carbon blacks having a surface area of less than 30 m²/g and a dibutylphthalate oil absorption of less than 80 cm³/100 gm. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983). Furthermore, case law holds that whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the “objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support.” In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range (i.e., scope). *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980), MPEP 716.02(d).

With respect to proper side-by-side examples, the comparative data with carbon black having surface area and absorption properties outside of the presently claimed scope, namely N660, only contain carbon black in a total amount of 60 phr. The inventive data all contain carbon black in a total amount of 80 phr or greater and thus cannot establish a criticality for the type of carbon black when different amounts are used.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

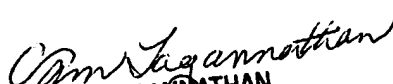
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/22/2006

Vickey Ronesi




VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
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